PROBABILISTIC HYDROLOGIC OUTLOOK
NATIONAL WEATHER SERVICE DES MOINES IA
312 PM CST THU FEB 18 2016

... SPRING FLOOD AND WATER RESOURCES OUTLOOK...

THIS FLOOD OUTLOOK IS FOR THE NWS DES MOINES SERVICE AREA. IT COVERS THE TIME PERIOD FOR LATE FEBRUARY THROUGH LATE MAY 2016. IT INCLUDES THE FOLLOWING RIVERS AND THEIR TRIBUTARIES IN NORTH CENTRAL...CENTRAL AND SOUTH CENTRAL IOWA...

IOWA...CEDAR...SKUNK...DES MOINES...RACCOON...NISHNABOTNA...
102...THOMPSON AND CHARITON RIVERS

- ...FLOOD OUTLOOK HIGHLIGHTS...
- \* THE RISK OF MINOR RIVER FLOODING IS ABOVE TO MUCH ABOVE NORMAL...GENERALLY NORTH OF INTERSTATE 80...FROM LATE WINTER INTO SPRING. THE RISK OF MINOR RIVER FLOODING SOUTH OF INTERSTATE 80 IS GENERALLY NEAR NORMAL. THE RISK OF MODERATE AND MAJOR RIVER FLOODING IS GENERALLY NEAR NORMAL AT ALL LOCATIONS.
- \* FLOODING FROM ICE JAMS IS POSSIBLE IN LOCATIONS WHERE RIVER ICE IS SEVERAL INCHES THICK AND COVERS MOST OF THE STREAM. THESE CONDITIONS ARE MOST LIKELY TO EXIST GENERALLY FROM U.S. HIGHWAY 20 NORTHWARD.
- \* THE ABOVE NORMAL SNOW PACK ACROSS THE NORTHERN HALF OF IOWA AS WELL AS ABOVE TO MUCH ABOVE NORMAL STREAMFLOWS...COMBINED WITH ANTICIPATED SNOWMELT OVER THE NEXT SEVERAL DAYS...WILL RESULT IN AN INCREASED SHORT-TERM FLOOD RISK. THIS INCREASED SHORT-TERM FLOOD RISK IS HELPING TO ELEVATE THE OVERALL LONG-TERM FLOOD RISK INDICATED IN THIS OUTLOOK. HOWEVER...ONCE THE EXISTING SNOW PACK MELTS SIGNIFICANTLY...A LACK OF ADDITIONAL ABOVE NORMAL PRECIPITATION WOULD MAKE THE OVERALL RISK OF SPRING FLOODING LESS THAN INDICATED IN THIS OUTLOOK.
- \* A CONSIDERABLE AMOUNT OF THE WINTER SEASON REMAINS. THUS...IT IS IMPORTANT TO CONTINUE MONITORING WEATHER AND RIVER CONDITIONS...AS WELL AS FUTURE OUTLOOKS...FOR ANY CHANGES TO THE FLOOD THREAT. ANY FUTURE PRECIPITATION...AS WELL AS CHANGES TO RIVER OR OTHER WEATHER CONDITIONS...MAY INCREASE OR DECREASE THE RISK OF FLOODING.
- \* MAPS AND GRAPHICS CONCERNING THE RISK OF FLOODING IS AVAILABLE ON THE NWS DES MOINES ADVANCED HYDROLOGIC PREDICTION SERVICE WEB PAGE AT... HTTP://WATER.WEATHER.GOV/AHPS2/INDEX.PHP?WFO=DMX . ON THAT PAGE CLICK ON THE TAB ABOVE THE MAP LABELED EXPERIMENTAL LONG-RANGE FLOOD RISK.

\* THE NEXT...UPDATED OUTLOOK WILL BE ISSUED ON THURSDAY...MARCH 3RD 2016. YOU MAY ALSO REFER TO OUR WEB SITE FOR MORE INFORMATION AT... HTTP://WWW.WEATHER.GOV/DESMOINES.

THIS OUTLOOK PROVIDES LONG-RANGE PROBABILISTIC RIVER OUTLOOKS FOR RIVER BASINS IN NORTH CENTRAL...CENTRAL AND SOUTH CENTRAL IOWA.
THIS OUTLOOK IS DIVIDED INTO THREE PARTS...THE FIRST PART FOR THE PROBABILITIES OF MINOR...MODERATE AND MAJOR FLOODING...THE SECOND PART FOR HIGH WATER AND THE FINAL PART FOR LOW WATER.

IN TABLE 1 BELOW...THE CURRENT /CS/ AND HISTORICAL /HS/ OR NORMAL PROBABILITIES OF EXCEEDING MINOR...MODERATE...AND MAJOR FLOOD STAGES ARE LISTED FOR THE VALID TIME PERIOD.

CS VALUES INDICATE THE PROBABILITY OF REACHING A FLOOD CATEGORY BASED ON CURRENT CONDITIONS.

HS VALUES INDICATE THE PROBABILITY OF REACHING A FLOOD CATEGORY BASED ON HISTORICAL OR NORMAL CONDITIONS.

WHEN THE VALUE OF CS IS MORE THAN HS...THE PROBABILITY OF EXCEEDING THAT LEVEL IS HIGHER THAN NORMAL. WHEN THE VALUE OF CS IS LESS THAN HS...THE PROBABILITY OF EXCEEDING THAT LEVEL IS LOWER THAN NORMAL.

## ...TABLE 1--PROBABILITIES FOR MINOR...MODERATE AND MAJOR FLOODING... VALID PERIOD: 02/21/2016 - 05/21/2016

	CAT	: : : :	CURRENT AND HISTORICAL CHANCES OF EXCEEDING FLOOD CATEGORIES AS A PERCENTAGE (%)							
. ()	FLOOD	STAGES	(FT)	:	MII	NOR	MODE	ERATE	MAC	JOR
LOCATION	MINOR	MOD	MAJOR	:	CS	HS	CS	HS	CS	HS
				:					( <u>-</u> )	
:CEDAR RIVER JANESVILLE	13.0	15.0	18.0	:	12	9	5	<5	<5	<5
:WEST FORK CEDAR FINCHFORD :WINNEBAGO RIVER	17.0	18.0	20.0	:	9	<5	<5	<5	<5	<5
MASON CITY :SHELL ROCK RIVER	10.0	14.5	15.5	:	16	10	7	<5	7	<5
SHELL ROCK :BEAVER CREEK	13.5	18.0	20.0	:	24	15	<5	<5	<5	<5
NEW HARTFORD :CEDAR RIVER	12.0	13.0	14.0	:	23	10	13	6	<5	<5

CEDAR FALLS	88.0	90.0	93.0	:	>95	50	87	41	27	16
:BLACK HAWK CREEK										
HUDSON	14.0	15.0	19.0	:	70	40	28	21	<5	<5
:CEDAR RIVER										
WATERLOO	13.0	19.0	21.0	:	69	32	11	6	6	<5
:IOWA RIVER			T N		1					
ROWAN	12.5	15.0	17.0	:	30	16	<5	<5	<5	<5
MARSHALLTOWN	19.0	23.0		-	21	8	<5	<5	<5	<5
:SOUTH SKUNK RIVER	VIAI					/	1/			
AMES W RIVERSIDE	12.5	16.0	16.5	:	<5	<5	<5	<5	<5	<5
:SQUAW CREEK	,12.0	10.0	10.0	•	.0	.0				
AMES LINCOLN WAY	10.0	14.0	15.5		9	11	<5	<5	<5	<5
:SOUTH SKUNK RIVER	10.0	14.0	13.3	•	J		\			<b>\</b> 3
	01 E	02 E	01 E		1 1	13	<b>∠</b> E	<b>∠</b> E	<b>∠</b> E	<5
AMES US 30	21.5	23.5	24.5		11		<5	<5	<5	
COLFAX	18.0	19.0	21.0		18	16	10	9	<5	<5
OSKALOOSA	24.5	28.5	30.0	-	<5	<5	<5	<5	<5	<5
:EAST FORK DES MOIN									_	
ALGONA	17.0	18.0	22.0	:	43	17	21	11	<5	<5
DAKOTA CITY	20.0	24.0	28.0	:	7	6	<5	<5	<5	<5
:BOONE RIVER										100
WEBSTER CITY	14.0	17.0	19.0	:	<5	<5	<5	<5	<5	<5
:BEAVER CREEK										
GRIMES	14.0	16.0	17.0	:	<5	<5	<5	<5	<5	<5
:NORTH RACCOON RIVE	R									
JEFFERSON	19.0	21.0	23.0	:	11	5	<5	<5	<5	<5
PERRY	15.0	18.0	20.0	:	86	47	46	28	20	16
:SOUTH RACCOON RIVE										
REDFIELD	20.0	24.0	27.0	:	<5	<5	<5	<5	<5	<5
:RACCOON RIVER	20.0	21.0	27.0				.0	.0	.0	
VAN METER	17.0	22.0	23.0		28	18	<5	<5	<5	<5
DES MOINES IA 28	36.0	38.0	40.0		25	17	6	<5	<5	<5
DES MOINES FLEUR	12.0	16.0	25.0		77	49	25	19	<5	<5
:NORTH RIVER	12.0	10.0	23.0	•	1 1	49	23	19	\	\3
NORTH KIVEK NORWALK	22 0	25.0	26 0		15	19	<b>∠</b> E	<5	<5	<5
	22.0	25.0	26.0	•	13	19	<5	< 5	< 5	< 5
:MIDDLE RIVER	000	0.6.0	000		-	1.0				- 1
INDIANOLA	23.0	26.0	28.0	:	7	10	<5	<5	<5	<5
:SOUTH RIVER					_	_	_	_		$\cup_{\underline{}}$
ACKWORTH	29.0	30.0	32.0	:	<5	<5	<5	<5	<5	<5
:CEDAR CREEK										
BUSSEY	25.0	30.0	32.0	:	<5	<5	<5	<5	<5	<5
:WEST FORK DES MOIN	ES RIVE	R								
ESTHERVILLE	8.0	13.0	14.5	:	95	42	9	9	<5	<5
EMMETSBURG	11.0	13.0	15.0	:	41	17	13	11	<5	<5
HUMBOLDT	10.0	13.0	14.0	:	34	22	<5	<5	<5	<5
:DES MOINES RIVER		INI								
FORT DODGE	10.5	16.0	17.0	:	50	27	<5	<5	<5	<5
STRATFORD	21.0	25.0	27.0		18	8	<5	<5	<5	<5
DES MOINES 2ND AV	23.0	26.0	30.0		5	<5	<5	<5	<5	<5
DES MOINES SE 6TH	24.0	26.0	30.0		80	52	28	21	6	<5
EDDYVILLE	61.0	68.0	70.0		75	47	<5	<5	<5	<5
v	01.0	00.0	, 0 . 0	•	, 5	1 /	\ \	\ \	\ \	<b>\</b>

OTTUMWA	11.0	15.0	19.0	:	56	33	6	<5	<5	<5
:THOMPSON RIVER										
DAVIS CITY	12.0	20.0	24.0	:	13	13	<5	<5	<5	<5
:SOUTH FORK CHARITO	N RIVER									
PROMISE CITY	25.0	28.0	31.0	:	<5	<5	<5	<5	<5	<5
:CHARITON RIVER		A			10					
CHARITON	19.5	26.0	29.0	:	<5	<5	<5	<5	<5	<5
MOULTON	36.0	37.0	38.0	:	<5	<5	<5	<5	<5	<5
:EAST NISHNABOTNA R	IVER									
ATLANTIC	19.0	23.0	24.0	:	10	6	<5	<5	<5	<5
:EAST FORK 102 RIVE	R							1	)	
BEDFORD	24.0	25.0	26.0	:	<5	<5	<5	<5	<5	<5

### LEGEND /

CS = CONDITIONAL SIMULATION / CURRENT OUTLOOK/

HS = HISTORICAL SIMULATION

FT = FEET

IN TABLE 2 BELOW...THE 95 THROUGH 5 PERCENT COLUMNS INDICATE THE PROBABILITY OF EXCEEDING THE LISTED STAGE LEVELS /FT/ FOR THE VALID TIME PERIOD. REFER TO TABLE 1 FOR THE FLOOD STAGES FOR EACH LOCATION.

### ... TABLE 2--EXCEEDANCE PROBABILITIES...

# CHANCE OF EXCEEDING STAGES AT SPECIFIC LOCATIONS

1	7	/ALID PE	ERIOD:	02/21/20	16 - 05	5/21/201	. 6
LOCATION	95%	90%	75%	50%	25%	10%	5%
:CEDAR RIVER							
JANESVILLE	6.2	6.6	7.7	9.1	11.2	13.1	15.1
:WEST FORK CEDAR RIV	ER						, ,
FINCHFORD	12.8	13.0	13.8	14.5	15.3	16.9	17.8
:WINNEBAGO RIVER							7
MASON CITY	6.1	6.7	7.2	7.9	8.8	11.2	18.9
:SHELL ROCK RIVER							
SHELL ROCK	11.3	11.7	12.1	12.7	13.5	14.7	16.5
:BEAVER CREEK							
NEW HARTFORD	8.2	8.3	9.6	10.5	11.6	13.3	13.9
:CEDAR RIVER						1/1/4 .	
CEDAR FALLS	89.0	89.7	90.7	91.8	93.3	95.0	97.4
:BLACK HAWK CREEK	1 /	1///-	NIT	OF			
HUDSON	12.9	13.3	13.9	14.6	15.1	15.6	16.0
:CEDAR RIVER							
WATERLOO	11.0	11.6	12.7	13.9	16.0	19.4	22.2
:IOWA RIVER							
ROWAN			11.4		12.7		
MARSHALLTOWN	16.6	16.9	17.2	18.0	18.8	19.7	20.9

:SOUTH SKUNK RIVER							
AMES W RIVERSIDE	6.8	7.1	7.7	8.7	10.2	11.2	11.6
:SQUAW CREEK							
AMES LINCOLN WAY	4.5	4.9	5.6	6.6	7.6	9.5	11.8
:SOUTH SKUNK RIVER							
AMES US 30	15.5	15 8	16.9	18.5	20.1	21.9	23.2
COLFAX	11.8	12.2	13.8	15.4	17.5		20.1
OSKALOOSA	13.9	15.4	17.1	18.9		21.9	23.1
:EAST FORK DES MOINE			± / • ±	10.3	201/		20.1
ALGONA	15.2		16.2	16.9	17.7	18.7	19.6
DAKOTA CITY	13.9	14.1	15.1	15.9	17.5	19.6	21.5
:BOONE RIVER	10.9		10.1	10.5	17.5	13.0	21.0
WEBSTER CITY	7.5	7.8	8.6	9.3	10.5	11.5	12.5
:BEAVER CREEK	7.5	7 • 0	0.0	J • J	10.5	11.5	12.5
GRIMES	6.3	7.0	9.0	10.6	12.0	12.8	13.4
:NORTH RACCOON RIVER		7.0	J. 0	10.0	12.0	12.0	10.1
JEFFERSON	11.5	12.2	13 2	15.0	16.8	19.2	20.0
PERRY	13.7	14.6	16.1		19.4	22.3	23.8
:SOUTH RACCOON RIVER		14.0	10.1	1 / . 0	19.4	22.3	43.0
REDFIELD	5.9	6.7	8.2	9.8	11.8	15.1	19.5
:RACCOON RIVER	5.9	0.7	0.2	9.0	11.0	T O • T	19.5
VAN METER	10.5	11 2	13.8	15.7	17.7	19.9	21.4
							38.8
DES MOINES IA 28	30.2		33.4		36.1		
	8.6	9.4	12.2	14.0	16.1	17.9	19.2
:NORTH RIVER	10 (	12 7	1 ( )	10 0	01 1	22.2	22 F
NORWALK	10.6	13.7	16.2	18.8	21.1	22.3	22.5
:MIDDLE RIVER	10 0	10 0	1 4 0	1 5 0	17 -	00 0	00.7
INDIANOLA	10.3	12.2	14.3	15.8	17.5	20.9	23.7
:SOUTH RIVER	0 0	0 7	11 🗇	1 2 0	1 5 0	00 0	0.4 7
ACKWORTH	8.8	9.7	11.7	13.0	15.9	22.0	24.7
:CEDAR CREEK	0 1	100	10.0	1 4 4	1.6.0	10 0	00 4
BUSSEY	9.1	10.8	12.6	14.4	16.2	19.3	20.4
:WEST FORK DES MOINE			0 1	100	100	100	10.5
ESTHERVILLE	8.0	8.6		10.2		12.9	13.5
EMMETSBURG		8.1	8.8	10.2	12.0	13.4	13.7
HUMBOLDT	7.6	8.0	8.7	9.3	10.6	11.4	12.6
:DES MOINES RIVER							
FORT DODGE		9.1	9.6	10.5	11.7	13.6	14.9
STRATFORD	14.1	14.9	16.4	17.8	19.5		23.6
DES MOINES 2ND AV	18.2	18.3	19.2	19.6	20.1	21.8	23.1
DES MOINES SE 6TH	22.3	22.7	24.4	25.4	26.4	29.1	30.5
EDDYVILLE	59.4	60.3	61.0	61.6	62.1	62.8	64.2
OTTUMWA	8.5	9.4	10.0	11.3	12.1	13.4	16.5
:THOMPSON RIVER	' /	IVIL	NIT	() 1			
DAVIS CITY	4.4	4.7	6.4	8.2	9.5	12.9	13.5
:SOUTH FORK CHARITON							
PROMISE CITY	6.9	8.8	12.9	18.1	19.8	21.8	22.1
:CHARITON RIVER							
CHARITON	12.6		15.6			18.6	19.0
MOULTON	26.0	26.0	27.4	29.6	33.9	34.7	35.1

:EAST NISHNABOTNA RI	IVER						
ATLANTIC	5.4	6.2	9.3	13.5	16.7	19.0	20.5
:EAST FORK 102 RIVER	}						
BEDFORD	14.1	15.3	16.4	17.9	19.6	21.3	22.5

IN TABLE 3 BELOW...THE 95 THROUGH 5 PERCENT COLUMNS INDICATE THE PROBABILITY OF FALLING BELOW THE LISTED STAGE LEVELS /FT/ FOR THE VALID TIME PERIOD. REFER TO TABLE 1 FOR THE FLOOD STAGES FOR EACH LOCATION.

### ... TABLE 3--NON-EXCEEDANCE PROBABILITIES...

#### CHANCE OF FALLING BELOW STAGES AT SPECIFIC LOCATIONS VALID PERIOD: 02/21/2016 - 05/21/2016 LOCATION 50% 75% 25% :CEDAR RIVER 1.5 1.6 1.6 JANESVILLE 1.4 :WEST FORK CEDAR RIVER 7.2 6.9 6.8 FINCHFORD 7.4 6.7 :WINNEBAGO RIVER MASON CITY 3.6 3.6 3.6 3.6 3.5 3.5 :SHELL ROCK RIVER SHELL ROCK 8.2 8.2 8.1 8.1 8.1 8.4 :BEAVER CREEK 4.1 3.8 3.6 3.4 3.3 NEW HARTFORD 3.5 :CEDAR RIVER 79.9 79.7 79.3 79.2 79.1 79.0 79.0 CEDAR FALLS :BLACK HAWK CREEK HUDSON 6.4 6.3 6.1 5.8 5.6 :CEDAR RIVER 6.6 6.2 6.1 6.0 6.0 6.4 WATERLOO :IOWA RIVER 4.2 4.2 4.2 4.1 3.8 ROWAN 4.0 3.9 MARSHALLTOWN 10.9 10.7 10.5 10.4 10.3 10.1 10.1 :SOUTH SKUNK RIVER AMES W RIVERSIDE 3.8 3.7 3.2 3.1 3.9 3.4 :SQUAW CREEK 2.2 2.1 2.0 1.9 1.8 AMES LINCOLN WAY :SOUTH SKUNK RIVER 9.1 AMES US 30 10.9 10.6 10.4 9.8 9.4 9.0 7.6 COLFAX 8.8 8.6 8.4 8.1 7.8 7.5 9.5 9.0 OSKALOOSA 10.6 10.1 7.6 7.5 :EAST FORK DES MOINES RIVER 7.7 7.5 ALGONA 7.7 7.6 7.6 7.4 7.4 DAKOTA CITY 8.5 8.5 8.3 8.2 8.1 8.1 :BOONE RIVER WEBSTER CITY 2.7 2.6 2.4 2.3 2.2 2.1 2.1 :BEAVER CREEK

GRIMES	4.3	4.3	3.9	3.6	3.3	3.1	3.0
:NORTH RACCOON RIVER							
JEFFERSON	6.3	6.2	5.9	5.7	5.5	5.3	5.2
PERRY	7.0	6.7	6.2	5.8	5.4	5.0	4.8
:SOUTH RACCOON RIVER							
REDFIELD	3.6	3.5	3.3	3.2	3.0	2.9	2.8
:RACCOON RIVER	15	1 4	1   V  (	J.NL	),,		
VAN METER	6.1	5.9	5.6	5.2	5.0	4.6	4.4
DES MOINES IA 28	24.6	24.4	24.0	23.5	23.2	22.8	22.6
DES MOINES FLEUR	3.1	2.8	2.4	1.8	1.5	1.0	0.9
:NORTH RIVER							)
NORWALK	8.1	7.8	7.4	6.8	6.3	6.1	6.0
:MIDDLE RIVER							7.
INDIANOLA	7.6	7.5	7.2	6.9	6.7	6.6	6.5
:SOUTH RIVER							
ACKWORTH	6.8	6.5	6.2	6.0	5.8	5.7	5.6
:CEDAR CREEK							
BUSSEY	6.1	6.0	5.8	5.7	5.6	5.5	5.4
:WEST FORK DES MOINE	S RIVER						
ESTHERVILLE	3.5	3.4	3.2	3.1	3.0	2.9	2.9
EMMETSBURG	2.4	2.2	2.1	2.0	1.9	1.7	1.6
HUMBOLDT	4.5	4.4	4.2	4.0	3.9	3.8	3.8
:DES MOINES RIVER							
FORT DODGE	5.4	5.1	4.9	4.6	4.5	4.3	4.3
STRATFORD	8.1	7.9	7.1	6.7	6.5	6.2	6.2
DES MOINES 2ND AV	14.6	14.5	14.2	14.0	13.9	13.7	13.6
DES MOINES SE 6TH	15.8	15.2	14.3	13.6	12.9	12.5	12.0
EDDYVILLE	55.0	54.1	53.0	51.8	50.7	50.1	49.8
OTTUMWA	5.4	4.8	4.1	3.4	2.8	2.5	2.3
:THOMPSON RIVER	J • 1	1.0		J • 1	2.0	2.0	2.5
DAVIS CITY	1.7	1.5	1.3	1.0	0.6	0.6	0.6
:SOUTH FORK CHARITON		1.0	1.5	1.0	0.0	0.0	0.0
PROMISE CITY	3.8	3.8	3.7	3.6	3.5	3.5	3.5
:CHARITON RIVER	3.0	3.0	J • 1	3.0	3.3	3.3	3.3
CHARITON	6 0	5 0	5.7	5 6	5.5	5.4	5.3
MOULTON	23.0	22.4		19.9		19.8	19.8
:EAST NISHNABOTNA RI		22.4	∠⊥•⊥	19.9	19.9	19.0	19.0
ATLANTIC		3.0	2.9	2.7	2.5	2.4	2.4
:EAST FORK 102 RIVER		3.0	۷.9	۷.1	۷.5	2.4	Z.4
BEDFORD		10 0	10.8	10 7	10 7	10.7	10.7
DENLOKN	10.0	10.0	10.0	10.7	10.7	10.7	10.7

THESE NUMBERS ARE CALCULATED USING MULTIPLE SPRING SEASON SCENARIOS FROM 30 OR MORE YEARS OF CLIMATOLOGICAL DATA. THESE NUMBERS ALSO TAKE INTO ACCOUNT CURRENT CONDITIONS OF THE RIVER...SNOW COVER AND SOIL MOISTURE...AS WELL AS 30 TO 90 DAY OUTLOOKS OF TEMPERATURE AND PRECIPITATION. BY PROVIDING THE COMPLETE RANGE OF PROBABILISTIC NUMBERS...THE LEVEL OF RISK ASSOCIATED WITH LONG-RANGE PLANNING DECISIONS CAN BE DETERMINED.

- ...CURRENT CONDITIONS AS OF FEBRUARY 18TH 2016...
- \* SNOW PACK...THE SNOW PACK IS ABOVE NORMAL ACROSS THE NORTHERN HALF OF IOWA. WATER EQUIVALENT OF THE SNOW PACK IS AS HIGH AS 2 TO 4 INCHES...MAINLY NORTH OF U.S. HIGHWAY 20. LITTLE IF ANY SNOW PACK EXISTS ACROSS THE SOUTHERN HALF OF THE STATE.
- \* SOIL MOISTURE...SOIL MOISTURE IS ABOVE TO MUCH ABOVE NORMAL ACROSS THE WESTERN HALF OF IOWA...AND NEAR-RECORD HIGH VALUES EXIST IN SOME LOCATIONS. ELSEWHERE...SOIL MOISTURE IS GENERALLY NEAR TO ABOVE NORMAL.
- \* FROST DEPTH...GROUND FROST IS EITHER SHALLOW OR NON-EXISTENT STATEWIDE. FOUR-INCH SOIL TEMPERATURES ARE GENERALLY IN THE 31 TO 33F DEGREE RANGE.
- \* STREAM FLOWS...STREAM FLOWS ARE GENERALLY ABOVE TO MUCH ABOVE NORMAL. A FEW LOCATIONS IN SOUTHERN IOWA ARE NEAR NORMAL.

S OF COMMENT OF COMMEN

\* DROUGHT CONDITIONS...DROUGHT CONDITIONS DO NOT EXIST ACROSS IOWA.

\$\$

ZOGG